

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A method of determining the suitability of at least one unfertilized oocyte for storage, said method comprising the steps of:
 - (a) providing an analysis of the first polar body from said unfertilized oocyte which indicates the desirability of storing said oocyte; and
 - (b) storing or discarding said unfertilized oocyte based upon the results from said analysis of said polar body.
2. (Original) The method of claim 1, wherein said unfertilized oocyte is stored.
3. (Original) The method of claim 1, wherein said unfertilized oocyte is discarded.
4. (Currently amended) The method of claim 2, further comprising (c) providing said stored, unfertilized oocyte for use in ~~a fertility or reproductive treatment~~ in vitro fertilization.
5. (Cancel)
6. (Currently amended) A ~~The method of claim 1, determining the suitability of at least one unfertilized oocyte for storage, said method~~ further comprising the steps of:
 - (a) providing the first polar body associated with an unfertilized oocyte;
 - (b) evaluating the first polar body to determine the desirability of storing said oocyte;
 - (c) ~~storing or discarding said oocyte based upon the evaluation of said polar body.~~

7. (Cancel)

8. (Currently amended) The method of claim [[7]] 1, ~~wherein (a) three or more first polar bodies are provided, each further comprising comparing the analysis of the first polar body associated with~~ to an analysis of one or more additional polar body associated with a different unfertilized oocyte than the oocyte of the first polar body.

9.-15. (Cancel)

16. (Currently amended) The method of claim [[15]] 2, wherein storing the unfertilized oocyte comprises the following steps:

(a) microinjecting into the cytoplasm of said unfertilized oocyte a protective agent which (i) comprises a sugar, (ii) is substantially non-permeating with respect to mammalian cell membranes, and (iii) maintains the viability of said cell such that it can be stored in a temporarily dormant state and restored to an active state; and

(b) treating said cell to cause it to enter the dormant state; and

(c) storing said cell in its dormant state.

17.-35. (Cancel)

36. (Currently amended) The method of claim [[32]] 16, wherein further comprising step (d) wherein step (d) comprises thawing said cell.

37.-48. (Cancel)

49. (Original) A method of selecting at least one unfertilized oocyte suitable for storage, said method comprising the steps of:

(a) providing the results of an evaluation of a first polar body derived from said unfertilized oocyte;

(b) storing or discarding said unfertilized oocyte on the basis of said results from the evaluation of said polar body;
to thereby select an oocyte suitable for storage.

50.-52. (Cancel)

53. (Currently amended) The method of ~~the above claims~~ claim 49, wherein the oocyte is a human oocyte.

54.-63. (Cancel)

64. (Original) A method of selecting an unfertilized oocyte for use in a fertility or reproductive treatment, said method comprising the steps of:

- (a) providing at least one unfertilized oocyte and a polar body from said oocyte;
- (b) placing said oocyte and polar body in storage; and
- (c) analyzing said polar body to determine the desirability of using said oocyte in a fertility or reproductive treatment.

65.-66. (Cancel)

67. (Currently amended) The method of claim ~~[[66]]~~ 64, further comprising: (d) assigning a value, code, or location to the frozen oocyte which indicates the suitability of said oocyte for use in fertilization or reproductive treatment.

68.-70. (Cancel)

71. (Currently amended) The method of ~~claim any one of claims 64, 65, 66, 67, or 69,~~ further comprising entering into a database the results of the evaluation or an indicator of the suitability of said oocyte for use in a fertility or reproductive treatment and a means for correlating said results with said oocyte.

72. (Cancel)

73. (Currently amended) A method of retrieving from storage an oocyte suitable for use in a fertility or reproductive treatment, comprising

(a) accessing a database produced according to ~~either~~ claim 71 ~~or 72~~; and

(b) retrieving said oocyte from storage if the results of said polar body evaluation in the database ~~or alternatively if the code, value, or location assigned to said oocyte in the database~~ that indicates that the oocyte is suitable for use in said fertility or reproductive treatment.

74. (Cancel)

75. (Currently amended) The method of ~~any one the above claims~~ claim 1, wherein ~~an evaluation or an~~ the analysis comprises determining if the polar body has one or more chromosomes above or below the normal chromosome number, to thereby evaluate the possibility that the associated oocyte has one or more chromosomes above or below the normal chromosome number.

76. (Currently amended) The method of claim 75, wherein a determination that the polar body has less than the normal number of chromosomes or more than the normal number of chromosomes causes the associated oocyte to be discarded.

77. (Cancel)

78. (Original) The method of claim 75, wherein the determination that the polar body has the normal number of chromosomes causes a party to store the associated oocyte.

79. -82. (Cancel)

83. (Currently amended) The method of ~~the above claims~~ claim 1, wherein ~~an evaluation or an~~ the analysis comprises determining if the polar body has one or more structural chromosomal abnormalities.

84. (Original) The method of claim 83, wherein the evaluation or analysis comprises:

- (a) providing at least one nucleotide primer capable of annealing to complementary chromosomal material;
- (b) mixing said primer with the chromosomal material from a first polar body under conditions that would allow annealing of the primer to its complementary chromosomal material;
- (c) adding an elongating mixture comprising a nucleotide polymerase and at least one labeled nucleotide in a mixture comprising at least four nucleotides, under conditions that would allow elongation of a hybridized primer.
- (d) placing the chromosomal material under conditions that would allow visualization elongated primers hybridized to said chromosomal material.

85.-88. (Cancel)

89. (Currently amended) The methods of ~~claims 85-88~~ claim 1, wherein ~~said evaluation~~ the analysis of a polar body comprises a subtractive genotypic analysis of one or more genes or regions of a gene comprising:

- (a) providing a determination of the presence or absence of one or more regions of a gene from said polar body of said unfertilized oocyte; and
- (b) comparing the gene or region of the gene from the polar body to both of the genes or regions of the genes from diploid maternal genetic material as an indication of what genes or regions of genes are present in the oocyte; wherein the oocyte contains the alternative gene of interest or region of interest to that present in the polar body.

90.-92. (Cancel)

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Page : 8 of 9

Attorney's Docket No.: 14375-003US1

93. (Currently amended) The method of ~~any one of the above claims~~ claim 1, wherein ~~an~~ the evaluation ~~or analysis~~ of the first polar body comprises determining the presence or absence of a particular allele or form of at least one gene.

94.-126. (Cancel)